

June 7, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Bulana R Conghlis

Subject:

Progress Report No. 313

May 1 through May 31, 2018 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
 as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Submitted Institutional Control Implementation and Assurance Plan (ICIAP), Revision 1, Midco I Site, Gary, Indiana to Pablo Valentin, USEPA from Tat Ebihara, AECOM. Dated May 2018.
- Submitted a letter from Bruce White, Midco Remedial Corporation (MRC) to Andrew Greenhagen,
 USEPA regarding Midco Waste Disposal Well No. 1 Status Update, Midco I and II Superfund Sites,
 Gary, Indiana. Dated May 22, 2018.
- Received a letter from Pablo Valentin, USEPA from Tat Ebihara, AECOM, regarding Technical Review
 Comments on Technical Memorandum Extent of Free Product in the vicinity of Monitoring Well Z-10,
 Midco II Site, Gary, Indiana. Dated May 29, 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
May	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None

- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

• No validated analytical results were received during the month of May 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING JUNE 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

•	RD/RA Project Plans	100%
	Underground Injection Well Application Package	100%
0	Investigation and Monitoring Activities	100%
•	Remedial Design of GWETS	100%
	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION



ENVIRONMENT & HEALTH

July 9, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD Balana & Congflis

Subject:

Progress Report No. 314

June 1 through June 30, 2018 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana RECEIVED

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PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS) as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Submitted a letter from Barbara Coughlin, Ramboll to Pablo Valentin, USEPA regarding Revised Technical Memorandum – Extent of Free Product in the Vicinity of Monitoring Well Z-10, Midco II Site, Gary, Indiana. Dated June 15, 2018.
- Submitted report entitled Monitored Natural Attenuation, Groundwater Remedy Demonstration, Midco I and II, Gary, Indiana to Pablo Valentin, USEPA from Shannon Flanagan, AECOM. Dated June 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

1	0
1	n
241 783 6	508 415,834,10
2	2 241,783,

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences - None

- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of June 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING JULY 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

8	RD/RA Project Plans	100%
9	Underground Injection Well Application Package	100%
	Investigation and Monitoring Activities	100%
9	Remedial Design of GWETS	100%
9	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION

None.





August 9, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Belana R Congfles

Subject:

Progress Report No. 315

July 1 through July 31, 2018 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
 as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Submitted report entitled Institutional Control Implementation and Assurance Plan (ICIAP), Midco II,
 Gary, Indiana to Pablo Valentin, USEPA from Shannon Flanagan, AECOM. Dated July 2018.
- Submitted a letter from Bruce White, Midco Remedial Corporation (MRC) to Pablo Valentin, USEPA regarding Midco – Change of Project Engineer. Dated July 17, 2018.
- Received letter from Pablo Valentin, USEPA to Shannon Flanagan, AECOM regarding Notification of the Fifth Five Year Review Start for the Midco I and Midco II Superfund Sites; Gary, Lake County, Indiana. Dated July 25, 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
July	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None

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Ramboll US Corporation 333 West Wacker Drive, Suite 2700, Chicago, IL $\,$ 60606 V +1 $\,$ 312.288.3800 F +1 $\,$ 312.288.3801

- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of July 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING AUGUST 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

9	RD/RA Project Plans	100%
•	Underground Injection Well Application Package	100%
•	Investigation and Monitoring Activities	100%
•	Remedial Design of GWETS	100%
0	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION



September 6, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Bulana R Conghlis

Subject:

Progress Report No. 316

August 1 through August 31, 2018 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
August	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None



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- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of August 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

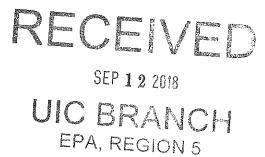
ACTIVITIES TO BE CONDUCTED DURING SEPTEMBER 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

9	RD/RA Project Plans	100%
•	Underground Injection Well Application Package	100%
•	Investigation and Monitoring Activities	100%
•	Remedial Design of GWETS	100%
	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION



October 5, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Balara R Conghlis

Subject:

Progress Report No. 317

September 1 through September 30, 2018

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
 as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Received letter from Pablo Valentin, USEPA to Barbara Coughlin, Ramboll regarding "Approval of the Revised Technical Memorandum – Extent of Free Product in the Vicinity of Monitoring Well Z-10 for the Midco II, Superfund Site; Gary, Lake County, Indiana. Dated September 10, 2018.
- Received letter from Pablo Valentin, USEPA to Shannon Flanagan, AECOM regarding "Review Comments on the June 2018 Midco I and II Monitored Natural Attenuation Groundwater Remedy Demonstration for the MIDCO I (EPA ID IND980615421) and MIDCO II (EPA ID IND980679559) Superfund Sites, Gary, Lake County, Indiana. Dated September 11, 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
September	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None

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- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

• No validated analytical results were received during the month of September 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING OCTOBER 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

	RD/RA Project Plans	100%	
	Underground Injection Well Application Package	100%	
9	Investigation and Monitoring Activities	100%	
0	Remedial Design of GWETS	100%	
9	Remedial Action	see Table 3	

PROBLEMS ENCOUNTERED AND THEIR SOLUTION



November 8, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Balara R Conghlis

Subject:

Progress Report No. 318

October 1 through October 31, 2018 Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
 as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Conducted Midco I and Midco II Five-Year Review site visits on October 16, 2018. Representatives of USEPA, Indiana Department of Environmental Management (IDEM), and AECOM participated.
- Conducted Midco Deep Well inspection on October 25, 2016. Representatives of USEPA and Ramboll participated.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection
 pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I
 and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively.
 The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass
 levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
October	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None



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- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

• No validated analytical results were received during the month of October 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING NOVEMBER 2018

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

8	RD/RA Project Plans	100%
0	Underground Injection Well Application Package	100%
•	Investigation and Monitoring Activities	100%
	Remedial Design of GWETS	100%
8	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION



December 7, 2018

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Balara R. Conghlis

Subject:

Progress Report No. 319

November 1 through November 30, 2018

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana DEC 1 4 2018

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PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

- Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS)
 as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).
- Submitted letter from Bruce White, Midco Remedial Corporation to Tom Turner, USEPA regarding "Midco Waste Disposal Well No. 1 – Request to Approve Closure, Midco I and II Superfund Sites, Gary, Indiana". Dated November 19, 2018.
- Submitted letter and report from Shannon Flanagan and Shankar Subramanian, AECOM to Pablo Valentin, USEPA regarding "Monitored Natural Attenuation (MNA) Groundwater Remedy Demonstration, Revision 1 and Response to U.S. EPA Comments Letter, dated September 11, 2018; Midco I and Midco II Sites, Gary, Indiana". Dated November 26, 2018.
- Submitted letter from Lisa McCoy, Indiana Department of Environmental Management (IDEM) to Thomas Turner, USEPA regarding "Indiana Department of Environmental Management, Acknowledgement of Enforceability of Deed Restrictions, MIDCO 1 Superfund Site, Gary, Indiana". Dated November 30, 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
November	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- Annulus system fluid additions None
- Noncompliance occurrences None

- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of November 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING DECEMBER 2018

Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

9	RD/RA Project Plans	100%
9	Underground Injection Well Application Package	100%
8	Investigation and Monitoring Activities	100%
•	Remedial Design of GWETS	100%
0	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION

January 9, 2019

MEMORANDUM

To:

Service List (attached)

USEPA, Underground Injection Control Branch (WU-16J)

Alan Tenenbaum, U.S. Department of Justice

From:

Barbara Coughlin, PhD

Bulara R Conghlis

Subject:

Progress Report No. 320

December 1 through December 31, 2018

Remedial Design/Remedial Action Midco I and II Sites, Gary, Indiana

PROGRESS TOWARD IMPLEMENTING THE CONSENT DECREE

• Continued shutdown of the Midco I and II ground water extraction and treatment systems (GWETS) as part of the shutdown period approved by United States Environmental Protection Agency (USEPA).

 Submitted letter from Lisa McCoy, Indiana Department of Environmental Management (IDEM) to Thomas Turner, USEPA regarding "Indiana Department of Environmental Management, Acknowledgement of Enforceability of Deed Restriction, MIDCO II Superfund Site, Gary, Indiana". Dated December 4, 2018.

MIDCO DEEP INJECTION WELL OPERATING CONDITIONS

- The daily maximum injection pressure, sight glass levels, and minimum differential between injection pressure and annulus pressure are summarized in Table 1. The operating flow rates at the Midco I and II Sites' ground water treatment system (GWTS) are presented on Figures 1 and 2, respectively. The daily maximum injection pressures and flow rates are presented on Figure 3. The daily sight glass levels are shown on Figure 4.
- Total volume of treated water injected (in gallons):

	Midco I Site	Midco II Site	Deep Well Site
December	0	0	0
Year-to-Date	0	0	0
Total-to-Date	174,050,592	241,783,508	415,834,100

- Annulus system fluid removals None
- · Annulus system fluid additions None
- Noncompliance occurrences None



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- Details of the Midco I and II Sites' non-GWETS-related shutdowns, and the scheduled and non-scheduled GWETS-related shutdowns are summarized in Table 2.
- The Midco I and II Sites had no non-GWETS-related shutdowns.

SAMPLING AND TEST RESULTS

No validated analytical results were received during the month of December 2018.

PLANS AND PROCEDURES COMPLETED UNDER THE RD/RA PROJECT PLAN

None during this reporting period.

ACTIVITIES TO BE CONDUCTED DURING JANUARY 2019

• Continue the shutdown of the Midco I and II Sites' GWETS.

PERCENT OF COMPLETION OF THE RD/RA

9	RD/RA Project Plans	100%
•	Underground Injection Well Application Package	100%
	Investigation and Monitoring Activities	100%
	Remedial Design of GWETS	100%
9	Remedial Action	see Table 3

PROBLEMS ENCOUNTERED AND THEIR SOLUTION